

BIBLIOGRAPHICAL NOTICES.

South-African Butterflies: a Monograph of the Extra-tropical Species. By ROLAND TRIMEN, F.R.S., F.L.S., F.Z.S., F.E.S., &c. Royal 8vo. Triebner and Co.

It is with great pleasure that we welcome the appearance of the first two volumes of this work, the need for which will be evident from the fact that not only has the earlier work by the same author (entitled '*Rhopalocera Africae Australis*') been long out of print, but our knowledge of African butterflies has been very greatly increased during the twenty-one years which have elapsed since the publication of that monograph. Mr. Trimen points out that the total of known South-African forms is at the present time about 380, whereas in 1866 (allowing for erroneous admissions to the list) only 197 natives of South Africa were recorded.

The present work commences with a most instructive Introductory Chapter, invaluable to students commencing the study of the *Rhopalocera*; the whole of the families, genera, and species are also described at considerable length and with the care and precision for which Mr. Trimen is remarkable; the notes which accompany the descriptions are useful and of interest, whilst at the same time they are free from all those sneering little cuts which too frequently mar the writings of lepidopterists.

Volume I., containing the family NYMPHALIDÆ, is illustrated by six chromo-lithographic and one plain plate, the latter being devoted to the structural features of butterflies and the others to figures of the larvæ and perfect insects; this volume is also accompanied by a useful map of South Africa.

Vol. II., containing the ERYCINIDÆ and LYCÆNIDÆ, is illustrated by three coloured plates; and although chromo-lithography is hardly so well suited to the representation of the smaller species as hand-colouring, the figures are on the whole decidedly good.

Vol. III. remains to be issued, and will contain the PAPILIONIDÆ and HESPERIDÆ, which Mr. Trimen estimates at about 142 species. It will probably be a bulky volume, and if, as may be anticipated, it is as perfect as its predecessors, the work will be one of the most complete monographs of butterflies hitherto offered to the public.

Bergens Museum Aarsberetning for 1886. 8vo. Bergen:
John Grieg, 1887.

THE Annual Report of the progress of the Museum at Bergen for 1886, which made its appearance towards the close of last year, forms a volume of considerably larger size than usual. It contains in all 288 pages and 24 plates, twelve of the latter of quarto size. Of course the ordinary reports upon the additions to the Museum and its Library and the affairs of the establishment generally occupy but a small portion of the space, most of which is devoted to the publication of several memoirs of great value and interest.

Foremost among these is an elaborate treatise by Mr. Fridtjof Nansen, the Curator of the Museum, on "The Structure and Combination of the Histological Elements of the Nervous System," a memoir of over 180 pages, written entirely in English and illustrated with eleven quarto plates. About a year and a half ago we published in the 'Annals' (vol. xviii. p. 209) a translation of a preliminary communication by the same author upon the histological structure of the central nervous system in the *Ascidia* and in *Myxine glutinosa*. His present memoir gives an account of his investigations upon the histology of the nervous system, with some remarkable generalizations and a valuable summary of the literature of the subject. It would lead us too far to attempt to give even a sketch of the results arrived at, which, indeed, would not be very intelligible without figures.

A second paper of importance to British zoologists is Mr. James A. Grieg's "Contribution to the Knowledge of the Norwegian Alcyonaria," containing descriptions of several new species of the group, illustrated with nine octavo plates. In this paper, which is written in Norwegian, with an English summary, the author describes species of the known genera *Sympodium*, *Stenogorgia*, *Paramuricea*, and *Protoptilum*, and proposes the establishment of two new genera, namely *Danielssenia* (sp. *D. irramosa*), an unbranched form with a horny axis, allied to *Gorgonia*, and *Stichoptilum* (sp. *S. arcticum*), a Pennatulid of the family Protoptilidæ, in which there is a strongly marked bilateral symmetry in the arrangement of the polypes. The general characters and structure of the species are admirably illustrated in the plates, which furnish, among other things, a very complete exposition of the characters of the calcareous spicules.

The other natural-history papers in the volume are in German from the pen of Dr. J. Brunchorst, and relate to cases of vegetable pathology. The first is on a very general disease of the potato, produced by a parasitic fungus nearly allied to *Plasmodiophora*, for which the author proposes the name of *Spongospora solani*. This fungus is believed to be the cause of the diseases of the potato known as "Schorf" in Germany and "scab" in England. In a second paper Dr. Brunchorst treats of the disease of cabbage-plants produced by the attacks of *Plasmodiophora brassicæ*, as a remedy or preventive of which he recommends the use of sulphuret of carbon. His third paper relates to the production of nodular swellings on the roots of certain plants and trees by the action of some forms of parasitic fungi, especially those of the genus *Frankia*.

The papers above cited are of so excellent a quality and of so much importance that, although we could do little more than indicate their existence, we have thought it desirable to call the attention of our readers to their existence, seeing that an "Annual Report" is not the place where such productions are generally looked for; and we must congratulate the authorities of the Museum at Bergen upon their having brought out such a valuable set of contributions to the literature of Natural History.